Response to Intervention Summer Institute

RTI for Secondary Literacy: Effective Strategies for All Students

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RTI and the Adolescent Reader: Responsive Literacy Instruction in Secondary Schools

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Brozo 2011

Session Overview

- In this session I demonstrate responsive and feasible ways of:
    - (1) determining the literacy abilities of all adolescent students
    - (2) expanding students' literacy capacities at all levels
    - (3) acquiring regular feedback on students' understanding and growth as readers and learners.
- The approach recasts such RTI features as universal screening, tiered interventions, and progress monitoring in ways that are achievable within complex secondary school environments.

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Determining the Literacy Abilities of All Students

- In the parlance of RTI, this is referred to as universal screening
- convenience data, such as high-stakes state test results, for universal screening
- Limitation - decisions made in August or September at the beginning of a new school year should be based on assessments made at that time and not on those from the previous spring, when state testing most often occurs

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Determining the Literacy Abilities of All Students

- During the summer some adolescents might catch the reading bug or have positive experiences in a special reading program elevating their skills and abilities beyond where they were the previous year.
- Conversely, some students will fall prey to the very real summer slide (Allington, et.al., 2010) and slip below their standing on spring testing.

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Content Literacy Inventory

- Viable approach to screening students for possible literacy concerns in a secondary school classroom
- More informative than commercially prepared tests, since it provides insight into students' reading abilities with material from which they will need to learn throughout the year
- The results of content-area inventory will show teachers which students are likely to have difficulty reading and thinking about assigned materials used in their course

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Content Literacy Inventory

- A typical content area reading inventory has two main sections
- The first one measures students' skills using book parts, reference features, and graphic material
- The other part of the inventory measures students' ability to answer comprehension and vocabulary questions for a text excerpt

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Section I of Content Area Reading Inventory
Math Text Example

- Where would you find information about trigonometric functions?
  (Can the student use the table of contents effectively?)

- On what page can you find information on transition curves?
  (Is the student familiar with the index?)

- On page 109, what is the relationship between the drawing of the electrical wires in Example 3 and the graph below it?
  (Can the student understand the graphs used in the text?)

- If you were given a list of math vocabulary words and I wanted you to find their definitions, where would you check first?
  (Is the student familiar with glossaries?)

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Section II of Content Area Reading Inventory
Math Text Example

Text excerpts are provided for the following questions:
- What is a characteristic?
  (Tests explicit vocabulary knowledge)
- What is a mantissa?
  (Tests explicit vocabulary knowledge)
- Explain the meaning of the word *essential* as it is used in the following sentence:
  "An essential variable in the formula is the number of times a year the interest is compounded."
  (Tests implicit vocabulary knowledge; the student must use context clues or prior knowledge to define the term)

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**Section II of Content Area Reading Inventory
Math Text Example**

Text excerpts are provided for the following questions:

- Where do exponential equations have applications? (List one or more.)
  (This information is directly stated in the text.)

- The letter e represents a special number in mathematics. What type of logarithm uses e?
  (This information is directly stated in the text.)

- Why would a bank advertise that it compounds interest on savings continuously instead of compounding once each month
  (The student must use reasoning skills to answer this question; the answer is not stated directly in the text)

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**Determining the Literacy Abilities
of All Students**

- No one ideal way of screening all students for possible literacy concerns in a typical middle or high school.
- Extant though older test data are convenient and eliminate the need for individual teacher effort in the screening process, but may not be as relevant or accurate.
- Screening techniques with actual disciplinary reading and writing secondary students must do may be immediately informative to classroom teachers but will require significant involvement on their part to construct curriculum-embedded measures that screen for reading challenges.
- Given the complexities and exigencies of secondary schools, teachers, administrators, and students must balance issues of expense, time, and relevance if meaningful literacy screening is to occur.

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**Acquiring Regular Feedback
on Students' Reading and Learning**

- RTI advocates (c.f. Fuchs & Fuchs, 2007) argue that Curriculum-Based Measurement (CBM) is the best option for monitoring student progress
- CBM is a comprised of a set of assessment methods created around the actual curricular materials and activities teachers are already using

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Cloze/maze passages

- Require students to read a passage in which every nth word or a particular type of words has been deleted.
- When students come to the deletion, they must select the correct word from multiple options.
- Cloze/maze has been well-documented in the research literature as a viable approach to reading assessment (DuBay, 2004; Madelaine & Wheldall, 2004).

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Cloze/maze passages

- One important advantage of cloze/maze is classroom teachers can transform their every day text sources into short, informative assessments.
- Whether an excerpt from the course textbook, an information book, magazine, or some other material, when formatted as a cloze/maze task, students must demonstrate contextual reading skills as well as understanding of key domain-specific terminology.

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Example of a Cloze/Maze Passage from Science

Suppose you could send a robot to another planet. What kinds of **(1) conduct, trials, experiments** would you **(2) list, program, code** the robot to carry out? Before you programmed the robot, you would need to figure out what **(3) information, order, rank** you wanted it to
(4) arrange, gather, group. Scientists are currently **(5) emerging, mounting, developing** robots that they plan to send to Mars. These robots are being **(6) designed, deliberate, planned**
to examine the **(7) atmosphere, ambiance, population**, rocks, gravity, and magnetic
(8) meadows, fields, turfs of the planet.

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Vocabulary Self-Awareness

- Students must have sufficient vocabulary knowledge if they are to comprehend disciplinary text (Marzano, 2005; Nagy & Scott, 2000).
- In many core academic subject area classrooms, instructional time for developing vocabulary knowledge has been found to be far from adequate (Flanigan & Greenwood, 2007; Scott, Jamieson-Noel, & Asselin, 2003).
- There is a very close relationship between vocabulary knowledge and overall reading comprehension (Pearson, Heibert, & Kamil, 2007; RAND Reading Study Group, 2002), but that relationship is even closer for content texts due to the numerous technical words and special word meanings (Harmon, Hedrick, & Wood, 2005).

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Vocabulary Self-Awareness

- It is important to assess students' vocabulary knowledge before reading or other tasks involving text (Fisher, Brozo, Frey, & Ivey, 2006).
- This awareness is valuable for students because it highlights their understanding of what they know, as well as what they still need to learn in order to fully comprehend the reading (Goodman, 2001).

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Vocabulary Self-Awareness

- Provide students a list of important words at the beginning of the reading or unit and have students write them in a vocabulary self-assessment chart
- Ask students to complete the chart before the lesson begins by rating each vocabulary word according to their level of familiarity and understanding. A plus sign (+) indicates a high degree of comfort and knowledge, a check mark (√) or question mark (?) indicates uncertainty, and a minus sign (--) indicates the word is brand new to them.
- Also ask students to try to supply a definition and example for each word. For words with check marks or minus signs, students may have to make guesses about definitions and examples.
- Over the course of the reading or unit, allow time for students to revisit their self-awareness charts to add new information and update their growing knowledge about key vocabulary.
- Because students continually revisit their vocabulary charts to revise their entries, they have multiple opportunities to practice and extend their growing understanding of the words.

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Vocabulary Self-Awareness

Word	+	?	-	Example	Definition
segregation					
civil rights					
protest					
boycott					

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Vocabulary Self-Awareness

- Since the process requires students to reflect on and document over time what they know about critical content-related terminology, vocabulary self-assessment is an ideal metacognitive tool.
- Moreover, because students have a record of their thinking about key concepts at different points in time, teachers have a ready-made indicator of progress.

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Bubble maps

- This approach to curriculum-embedded assessment is an alternative to vocabulary matching tasks for monitoring students' understanding of key disciplinary concepts.
- The visual structure and prompts of a bubble map may offer students a more interesting and potentially more engaging format.
- This approach, which goes by various names, such as semantic maps or concept ladders, uses a diagram in which students must identify and organize the relevant terms and concepts of a particular topic.

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Bubble maps

- Disciplinary teachers create a partially completed graphic that depicts networks of related terms and concepts, some of which are missing.
- Using a random list of the missing vocabulary, students are to supply the appropriate terms in their correct places on the bubble map.
- The advantage of the bubble map approach to simple matching approaches is that they provide insight into a student's ability to see connections and make critical links within a topic.

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Example of Bubble Map in Science

A. mass

B. temperature

C. heavenly motions

D. Kepler's 3rd Law

Scientific Model of Stars

Is based on

1._____

Such as   using

2._____   3._____
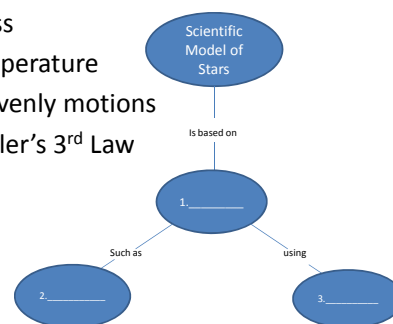
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Expanding Students' Literacy Capacities at All Levels with Responsive Instruction

- Establishing a comprehensive program that supports literacy development for secondary students at all levels requires a vision of responsive instruction that places emphasis on:
- (a) creating a rich and vibrant overall literate culture in the school,
- (b) prevention over intervention
- (c) creative services for meeting the needs of students with serious reading difficulties, and
- (d) building engaged literate identities for adolescents.

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Creating a Rich Literate School Culture

- In a very real sense, the true Tier I of RTI or for that matter any comprehensive literacy program is the school culture.
- The overall school culture is comprised of many facets that either nurture, ignore, or stifle the development of youths' positive literacy attitudes, practices, and identities
- To reach adolescent youth as readers, bolster their literate identities, and sustain their efforts as readers and learners requires an entire school effort

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Creating a Rich Literate School Culture

Sustained print encounters of student-selected texts

- SSR – Sustained Silent Reading time or other similar opportunities (DEAR - Drop Everything and Read; DIRT - Daily Individual Reading Time)
- Make certain every student is engaged with text of their choosing on a regular basis.
- Creating time and space during the school day for recreational, self-selected reading allows students to read about their interests, discover new interests, gain skill and background knowledge, and develop a habit of reading
- An added benefit is that as students expand their word knowledge and overall abilities as readers their school achievement tends to improve, as well

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Creating a Rich Literate School Culture

- Most youth by the time they reach middle and high school have mastered basic reading skills.
- From there, the surest road to a richer vocabulary and expanded literacy is wide and sustained reading
- Some adolescents' reading difficulties can be traced to their lack of interest in and downright avoidance of print experiences
- The more time students spend with books and print, the more growth they exhibit on measures of vocabulary and reading achievement

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Preventing Reading Failure

- IDEA 2004 stipulates 15% of the monies used for learning disabilities programs should be devoted to prevention
- When an entire school makes a commitment to students' reading development and engagement with text through regular opportunities for self-selected, sustained print encounters, an important first step in the prevention of reading failure has already begun.
- Within an overall school context supportive of adolescent literacy, any other related initiatives will be reinforcing and are likely to bring about achievement gains

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Preventing Reading Failure

- There is nothing in the Act barring teachers outside of special education from delivering RTI or any other literacy support service
- Indeed, the National Association of State Directors of Special Education (NASDE, 2007) has made clear that

    RTI is not something that happens in special education. Rather it is a method for teaching all students that needs to be driven by general education teachers (p.2).

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Prevention at the whole class level

- Secondary content classroom teachers can build and reinforce literacy skill while limiting potential reading difficulties by incorporating disciplinary literacy practices into their daily instruction
- There are literally hundreds of content literacy strategies available to secondary classroom teachers

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Content Literacy Strategies
in the Louisiana Comprehensive Curriculum

Readiness	Interactive Comprehension	Extending New Learning
SQPL	Word Grid	Professor Know-It-All
Opinionnaire/Anticipation Guide	Process Guide	RAFT
Vocabulary Self-Awareness	Reciprocal Teaching	Story Chains
Brainstorming	GISTing	Learning Logs
	Questioning the Author (QtA)	Vocabulary Cards
	Split-Page Notetaking	SPAWN
	Graphic Organizer	
	DR-TA	

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Within class differentiated instruction

- At the point when any student needs extra support, whether indicated on broad level or formative assessments, some form of intervention or more responsive instruction is required

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Process Guides

- Readers who find it difficult to read and learn from material independently can be provided scaffolding in the form of directions, questions, and prompts to support their text processing
- Process guides scaffold students' comprehension within unique formats
- They're designed to stimulate students' thinking during or after their reading by helping students focus on important information and ideas, making their reading more efficient
- Process guides prompt thinking, ranging from simple recall to connecting information and ideas to prior experience, applying new knowledge, and problem solving

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Sample Process Guide Prompts
for a Chapter in a History Textbook

1. In the section under Afghanistan you will learn the background of this country and why there is so much unrest there. Now read the first paragraph. **Be prepared to explain the term *Taliban*.**

The Taliban is_____

2. The paragraph on page 66 will discuss some events caused by the Taliban. Read the paragraph carefully. **List below some of the events connected with the Taliban:**

The Taliban did these things: _____
_____

3. On page 67 the last paragraph of this section tells us whether or not the Taliban has been successful in its attempt to control Afghanistan. Read the paragraph and decide. Write your response here
_____

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Creative Services for Meeting the Needs of Students with Serious Reading Difficulties

CROSS-AGE BUDDY READING PROGRAM

- ONE OLDER STRUGGLING READER PAIRED WITH ONE YOUNGER NOVICE OR STRUGGLING READER

- OLDER STUDENT PREPARES READING MATERIAL AND STRATEGIES

- READS TO AND WITH YOUNGER STUDENT, HELPING WITH WORD ATTACK AND COMPREHENSION

- CHOOSES TEXTS AND PRACTICES BASED ON YOUNGER STUDENT'S INTERESTS AND EXPERIENCES

- ONE TO THREE SESSIONS PER WEEK

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Reading Buddies

- 17-year-old Tremayne & 6th grader LaBron in a cross-age tutoring program

- Read about and researched Chicago Bears football

- Led to performance enhancement drugs, steriods

- Explored the exaggeratedly muscled heroes and villains in computer games, such as *True Crime: Streets of LA* (Activision), *WWF Wrestlemania* (THQ), *Take No Prisoners* (Red Orb), *The Hulk* (Vivendi-Universal), *Army Men: Sarge's Heroes* (3DO), and *X-Men: Mutant Academy* (Activision). .

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Reading Buddies

- Pictures were then downloaded into *Adobe Photoshop* so they could be altered

- Tremayne and LaBron learned how to rework the main characters' physiques, reshaping them in ways that were more proportional to normal muscle development

- They displayed their work in a PowerPoint presentation with "before" slides, accompanied by captions warning of the dangers of steroids and other illegal substances for building muscle, and "after" slides with statements about good health, diet, and fitness

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Creative Services for Meeting the Needs of Students with Serious Reading Difficulties

Community Mentors as Reading Buddies

- Gender- and cultural-matched role models have the most positive effect on educational outcomes (Zirkel, 2002) and are sorely needed in the lives of many boys (Brozo, 2011)

- Individuals from the community who are active readers can work one-on-one with struggling readers

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Community Mentors as Reading Buddies for Boys

- One mentoring pair included Rickey, a recently retired Naval pilot and instructor, and Marcus, a 11-year-old fifth-grader with a reading achievement level of 3rd grade and a special education label

- Built fluency with the book *The House that Crack Built*

- Read the novel *Monster* and role played scenes

- Wrote letters to Congressmen urging them not to support legislation to make the death penalty an option for minors found guilty of capital murder

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Teaching Basic Skills in Context to Students with Serious Reading Challenges

- Finding the right balance of engaging text experiences and basic skills instruction for adolescents with very low reading levels and serious word recognition difficulties is, as Beers (2003) aptly points out:

  "difficult on good days, beyond frustrating on bad days" (242).

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Teaching Basic Skills in Context to Students with Serious Reading Challenges

- Adolescents who may still need significant development in basic word recognition skills, approaches must stress contextual applications with real text that is engaging and accessible.
- Both fluency and word recognition can be improved through contextualized approaches
- Giving struggling adolescent readers immediate application of skills with text that informs and pleases will help them remain engaged instead of giving up and build more confident and competent reading identities.

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Fluency development in context

- An emphasis on fluency typically diminishes as students move from intermediate to middle grades and beyond (Rasinksi, et. al., 2005).
- Although some argue that fluency work with struggling adolescent readers can result in several benefits, including improved metacognition, an increase in confidence about reading skill, increased exposure to text, and the realization that ability improves with practice (Dudley, 2005).

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Fluency development in context

- Fluency--that is how accurately, rapidly, and with expression one reads a text--will depend on one's word recognition, print knowledge, and print experience skills
- The more automatic these fundamental reading skills are, the more cognitive energy is reserved for thinking about and comprehending text
- This may be of particular concern when negotiating disciplinary text with its expository text structures and complex concepts and terms.
- Text of this nature places a premium on deliberate and thoughtful reading.
- Consequently, students who recognize and can glide through most words in disciplinary text will have greater cognitive capacity for comprehension

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Fluency development in context

- *Increase knowledge of high-frequency and sight words*
- *Create Opportunities for Repeated Readings of Familiar Text*
- *Use Echo and Choral Reading to Model Phrasing and Intonation*
- *Create Opportunities for Readers' Theater that Avoid Stigmatizing Struggling Readers*

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Developing word recognition skills in context

- Approaches that emphasize application of word recognition skills in context have the potential for helping striving readers increase comprehension
- Secondary level students need to engage in as much authentic reading of disciplinary text as possible in order to gain information and knowledge

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Developing word recognition skills in context

- Adolescents with seriously underdeveloped word recognition skills and strategies may need a number of accommodations in order to increase their capacity.
- First among these is to teach word recognition in context with text that is accessible.
- If too many words are unrecognizable, there will not be enough context to make instruction in this strategy worthwhile.
- Less challenging texts for readers in these situations is critical so they can maximize cognitive effort on learning word recognition strategies (Brozo & Afflerbach, 2011).

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Developing word recognition skills in context

- Word: *Confederate*

- Context: The Union soldiers marched up the rugged mountain trail the entire day, then made camp on the summit. The wide open view into the valley below offered the perfect lookout on the advancing <u>Con   ate</u> army.

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Developing word recognition skills in context

With the American rapper Snoop Dogg's lyrics for "I Love to Give You Light" a 7th grade class found numerous examples of words with /ck/ and /ch/ blends. These words were written into a t-chart in their vocabulary notebooks.

ch	ck
choir	background
such	jackers
alchemist	glock
preach	block
chuuch	locked
teachin	black
watchin	
each	
preachin	
reach	
purchase	
Beach	
child	

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Developing word recognition skills in context

- The students worked with a partner to think of new words with the /ch/ and /ck/ sounds and add them to the t-chart.

- Student pairs then wrote their own rap lyrics that contained all or some of the new words they generated for the two word families.

- As one student read the rap the other kept rhythm on his desk top:

I put my *socks* in my *backpack* when I go to school. I put my backpack in my *locker* or I look like a fool.   I get my *socks* from my backpack when I go to gym. Where I *catch* the ball then *stick* it in the rim.

- After activities like this, students began recognizing examples of these word families as they encountered them in their reading and demonstrated the ability to decode words with these elements more successfully

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Conclusion

- All students, especially struggling students, will need the best of what we know about literacy and youth culture.
- They will need engaging and meaningful strategies that expand interest, build competence, and promote a sense of agency and independence.
- They will need highly knowledgeable and skillful teachers as well as comprehensive literacy programs that offer opportunities for encounters with multiple texts and forms of representation throughout the school day.
- And, perhaps most critically, striving readers will need teachers and school personnel interested in forming close and supportive relationships with them as a context for literacy and learning growth.

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Remember…

Youth are our hope for the future,
*But **you** are their hope today.*

Thank you!

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